

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Independent claims 1, 17, and 21 are currently being amended. Dependent claims 11, 13, 18-20, 22, and 31 are currently being amended largely for reindexing purposes. Claims 42 and 43 are new.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-43 are now pending in this application, of which claim 15 is presently withdrawn and claims 34-41 were previously withdrawn.

Independent claims 1, 17, and 21 have been amended to add a further limitation concerning authentication. Support for this amendment can be found within the originally filed application at least at paragraphs [00026] and [00128]-[00133] in the Specification and in original dependent claim 15. Claims 42-43 have been appended as new claims, also supported by at least paragraphs [00026] and [00128]-[00133] in the Specification. No new matter is added by way of the present amendment.

Claim Rejections Under 35 U.S.C. § 103

Claims 1, 3-6, 13-18, 19-21, 23-31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mishra et al., in view of McDaniel et al. and further in view of Rothschild. Applicant traverses for reasons set forth below.

Claims 1, 17, and 21 stand rejected as obvious in view of prior art references corresponding to Mishra et al, U.S. Patent No. 6,523,166 B1, in possible combination with McDaniel et al, U.S. App. No. 20030126464 A1, and further in combination with Rothschild, U.S. Patent No. 5,642,394 (Office Action, July 30, 2007). The Examiner repeats the argument

from the previous Office Action, dated November 3, 2006, that the combination of Mishra, McDaniel, and Rothschild teaches each and every element disclosed by Applicant in independent claims 1, 17, and 21. Applicant proposes an amendment to independent claims 1, 17, and 21 to traverse the rejection.

Applicant amends claim 1 as follows to reflect and to recite the limitation previously found in dependent claim 15:

A secure detection network system having a plurality of nodes, each node comprising a processor and storage means, the system comprising:

- A. a plurality of remote nodes, each remote node comprising a set of detector interfaces configured to couple to a set of detectors disposed to detect the presence of an illegal asset within a shipping container;*
- B. at least one server node configured to initialize and install each remote node in the plurality of remote nodes, including delivering to each remote node an agent module, said agent module for each remote node comprising a node specific configuration file defining a set of nodes with which the remote node can communicate and a different encryption means corresponding to each node in the set of nodes; ~~and~~*
- C. a communication path coupling the plurality of remote nodes and the at least one server node; ~~and~~*
- D. orthogonal authentication means for selectively restricting access to at least one of the plurality of remote nodes.*

The current application is directed to a secure detection network to ensure the security of sensitive assets, where an encryption is configured at each network node and a physical authentication is recommended at each network node. The Mishra reference is directed to a dynamic, automatic download of application and communications software from a centralized network store. The McDaniel reference is directed to securing a communications network. The Rothschild reference is directed to an X-ray detector in combination with a processor and a display.

Applicant has previously argued that that there is nothing in Mishra to teach or suggest "...delivering to each remote node an agent comprising...a node specific configuration file...", as recited in claim 1. The arguments made by the Examiner are off point. The arguments presented by the Examiner concerning Mishra address finding "...an appropriate application..." (Mishra, column 6, line 67) at each network node, but arguments presented by the Examiner do not address Applicant assertion that "...information returned to the remote node is a node specific configuration file..." (Amendment and Reply, May 3, 2007).

More to the point, Mishra does recite "...APIs are provided by the on-demand installation mechanism..." (Mishra, column 10, lines 9-10), and Mishra recites a downloaded "...API is used to search for applications or COM component implementations that can satisfy activation request[s] from [a] COM (OLE)/Shell..." (Mishra, column 10, lines 15-17), which may suggest downloaded configuration files. But Mishra does not teach or suggest "...a node specific configuration file defining...a different encryption means corresponding to each mode...", as further recited in claim 1. Nor does Mishra teach or suggest "...an orthogonal authentication..." at each node, a physical authentication, as recited in amended claim 1 and recited previously in withdrawn dependent claim 15.

McDaniel does recite an encryption at each network node and an authentication. McDaniel implements "...three authentication mechanisms: a null authentication method, an open SSL-based mechanism, and a Kerberos mechanism..." (McDaniel, page 14, paragraph [0201]). Neither the null authentication method nor the SSL-based mechanism require authentication at both ends of the communications link. Specifically, neither the null authentication method nor the SSL-based mechanism require authentication of a client, as specified by Applicant.

The Kerberos mechanism does require client authentication. Kerberos client authentication is provided for by a client ID, a password, and a time stamp, which collectively comprise a digital certificate. By contrast, Applicant teaches away from relying a digital certificate. Applicant recites in amended claim 1 and withdrawn dependent claim 15 an "...orthogonal authentication means...". Amended claim 1 and withdrawn dependent claim 15

are supported in the Specification, where “...orthogonal authentication...eliminates the need for digital certificates and extends security procedures into the machine layer...” (Specification, page 30, paragraph [00128]).

The Specification continues with a detailed example of steps that may comprise an orthogonal authentication. Steps that comprise an orthogonal authentication may include: “...a facial scanner in [a] building...”, “...a hand geometry scanner at the entrance to [a] room...”, “...a fingerprint scanner on [a] desk...”, “...a [telephone] voice print scan...”, and a personal confirmation by a supervisor (Specification, page 30, paragraphs [00129]-[00133]). Orthogonal authentication, in contrast to a digital certificate, is a physical authentication rather than a virtual authentication.

Applicant argues that neither prior art references Mishra nor McDaniel disclose the use of orthogonal authentication means for a secure detection network to ensure the security of sensitive assets. Any comparison of the encryption and authentication of Applicant to those specified by McDaniel is incorrect in view of the present claim amendments. Applicant specifically avoids any need for digital authentication during establishment of a communication link between nodes. Instead, Applicant provides orthogonal authentication means, such as requiring a physical authentication.

Dependent claims 3-6, 13-14, and 16 depend directly or indirectly from independent claim 1, each including by its dependency all of the limitations of independent claim 1. Accordingly, even if the references are combined as suggested in the Office Action, dependent claims 3-6, 13-14, and 16 are not obvious in view of the combination at least for the reasons argued above with respect to independent claim 1.

Amended independent claims 17 and 21 each recite similar limitations as amended independent claim 1, at least with respect to orthogonal authentication. Thus, even if the references are combined as suggested in the Office Action, independent claims 17 and 21 are not obvious in view of the combination for at least the reasons argued above with respect to amended independent claim 1.

Dependent claims 18-20 depend directly or indirectly from independent claim 17 and dependent claims 23-31 and 33 depend directly or indirectly from independent claim 21. By their dependency, each of dependent claims 18-20, 23-31, and 33 include all of the limitations of its respective base claim and is therefore allowable for reasons set forth above with respect to the respective base claim.

Claims 2 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mishra et al., in view of McDaniel et al. and further in view of Rothschild as applied to claim 1, and further in view of the article by Lian et al. (“Time Delay Modeling And Sample Time Selection For Networked Control Systems”). Applicant traverses for reasons set forth below.

Dependent claims 2 and 22 depend from independent claims 1 and 21, respectively, each including by its dependency all of the limitations of the respective independent claim. Lian et al. fails to cure the deficiency of the combination cited above with respect to independent claims 1 and 21. Namely Lian et al. fails to teach or suggest at least the concept of orthogonal or physical authentication and thus fails to cure the defect of the combination of Mishra et al., McDaniel et al., and Rothshield. Accordingly, even if the references are combined as suggested in the Office Action, dependent claims 2 and 22 are not obvious in view of the combination at least for the reasons argued above with respect to independent claims 1.

Claims 11-12 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mishra et al., in view of McDaniel et al., and further in view of Rothschild as applied to claim 1 above, and further in view of the article by Hogg et al. (“A Photometricity and Extinction Monitor at the Apache Point Observatory”). Applicant traverses for reasons set forth below.

Dependent claims 11-12 depend directly or indirectly from independent claim 1, and by their dependency include all of the limitations of claim 1. Dependent claim 32 depends indirectly from independent claim 21, and by its dependency includes all of the limitations of claim 21.

As an initial matter, the combination of Hogg et al. with the other references as suggested in the Office Action is improper, at least because Hogg et al. is non-analogous art. According to §2141.01 of the M.P.E.P., in order to rely on a reference as a basis for rejection, “...the reference must either be in the field of applicant’s endeavor or, if not, then be reasonably pertinent to the

particular problem with which the invention was concerned...”. Hogg et al. is directed to an unsupervised software “robot” that automatically and robustly reduces and analyzes CCD observations of photometric standard stars. (Abstract). Applicant describes in paragraph [0011] a secure network in which at least one node therein generates and distributes to each node an intelligent agent module and a set of node-specific configuration files. Hogg et al. is directed to a software robot that reduces and analyzes image data. In Section 13 relied upon in the Office Action, Hogg et al. discusses archived output data from the photometricity monitor robot. Applicant fails to see how Hogg et al. could be construed as either in the field of Applicant’s endeavor, or reasonably pertinent to the particular problem with which Applicant’s invention is concerned.

Even if Hogg et al. were combined with the other references as suggested in the Office Action, Hogg et al. fails to cure the deficiency of the combination cited above with respect to independent claims 1 and 21. Accordingly, even if the references are combined as suggested in the Office Action, dependent claims 11-12 and 32 are not obvious in view of the combination at least for the reasons argued above with respect to independent claim 1.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-3431. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-3431. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 50-3431.

Respectfully submitted,

Date: August 12, 2008

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